In the Claims:

Please amend claims 1, 9, 16 and 17 as follows.

1. (Currently Amended) A mixture to be employed in conjunction with water for preparing a slurry that hydrates to form a high strength flooring compound, comprising:

about 50% to about 98% by weight calcium sulfate hemihydrate, at least 25% of said calcium sulfate hemihydrate being the beta-calcined form;

about 0.2% to about 10% by weight of a polycarboxylate dispersant comprising oxyalkylene-alkyl ether and unsaturated dicarboxylic acid; and

0.05-50% by weight enhancing component.

2. (Original) The mixture of claim 1 wherein said calcium sulfate hemihydrate comprises at least 90% by weight of the beta-calcined form.

3. (Original) The mixture of claim 2 wherein said calcium sulfate hemihydrate consists essentially of the beta-calcined form.

4. (Original) The mixture of claim 2 wherein the concentration of said hemihydrate is from about 80% to about 95% by weight.

5. (Original) The mixture of claim 1 wherein said enhancing component comprises lime.

6. The mixture of claim 5 wherein the concentration of said lime in said mixture is from about 0.05% to about 10% by weight.

7. (Original) The mixture of claim 1 wherein said mixture comprises from about 0.2% to about 1% by weight polycarboxylate on a dry, aggregate-free basis.

8. (Original) The mixture of claim 1 further comprising polysaccharide.

9. (Currently Amended) A subfloor comprising a hydrated product of a pumpable slurry comprising:

about 50% to about 98% calcium sulfate hemihydrate, said hemihydrate comprising at least 25% of the beta-calcined form;

about 0.2% to about 10% of a polycarboxylate dispersant comprising oxyalkylene-alkyl ether and unsaturated dicarboxylic acid;

about 0.05% to about 50% enhancing component; and

from about 12cc to about 40 cc water per 100 grams of a combined mixture of the hemihydrate, the polycarboxylate and the enhancing component on a dry solids basis, said hydrated mixture having a compressive strength in excess of 2500 psi (175 Kg/cm2).

10. (Original) The subfloor of claim 9 wherein said hemihydrate consists essentially of beta-calcined hemihydrate.

11. (Original) The subfloor of claim 9 wherein the concentration of said polycarboxylate dispersant is from about 0.2% to about 1% by weight on a dry, aggregate-free basis.

12. (Original) The subfloor of claim 9 wherein said enhancing component comprises lime.

13. (Original) The subfloor of claim 11 wherein said water is present in an amount less than 35 cc water per 100 grams mixture on a dry, aggregate-free basis.

14. (Original) The subfloor of claim 13 wherein said water is present in an amount less than 25 cc per 100 grams of said mixture on a dry, aggregate-free basis.

15. (Original) The subfloor of claim 8 wherein said slurry further comprises polysaccharide.

16. (Currently Amended) A subfloor comprising a hydrated product of a pumpable slurry comprising:

about 50% to about 98% calcium sulfate hemihydrate;

about 0.2% to about 10% of a polycarboxylate dispersant comprising oxyether-alkyl ether and dicarboxylic acids;

about 0.05% to about 50% enhancing component; and

from about 15cc to about 25 cc water per 100 grams of a combined mixture of the hemihydrate, the polycarboxylate and the enhancing component on a dry solids basis, said hydrated mixture having a compressive strength in excess of 2500 psi (175 Kg/cm2).

17. (Currently Amended) A method of preparing a subfloor comprising:

obtaining ingredients comprising from about 50% to about 98% calcium sulfate hemihydrate comprising at least 25% of the beta-calcined form, from about 0.2% to about 10% of a polycarboxylate dispersant comprising oxyalkylene-alkyl ether and unsaturated dicarboxylic acid and from about 0.05% to about 50% of an enhancing component, all on a dry solids basis;

separating the ingredients into wet ingredients and dry ingredients;

dry blending the dry ingredients;

measuring from about 12 cc to about 40 cc of water per 100 grams of the ingredients on a dry solids basis;

forming a mixture of the wet ingredients and the water;

forming a slurry from the dry ingredients and the mixture;

pouring the slurry in an area prepared for the subfloor; and,

allowing the slurry to set, forming the subfloor having a compressive strength in excess of 2500 psi.

18. (Original) The method of claim 17 wherein the calcined gypsum comprises beta-calcined gypsum.

19. (Original) The method of claim 17 wherein said calcium sulfate hemihydrate comprises at least 80% by weight of the dry mixture on an aggregate-free basis.

20. (Original) The method of claim 17 further comprising the step of mixing an aggregate into the dry ingredients prior to forming the slurry.

21. (Original) The method of claim 17 further comprising packaging the dry mixture after said dry blending step.

22. (Original) A subfloor comprising the hydrated product of the process of claim 16.